

REMARKS

In the non-final Office Action dated October 17, 2005, the Examiner rejected claims 1-9, 11, 14-17, 19, 24, 27, 28, and 30-36 under 35 U.S.C. 103(a) as being unpatentable over FEDERKINS et al. (U.S. Patent No. 5,123,014) in view of GULICK (U.S. patent No. 5,845,085; and rejected claims 6, 8, 14, 16, 27, and 33 under 35 U.S.C. § 103(a) as being unpatentable over FEDERKINS et al. and GULICK and further in view of ANDERSON et al. (U.S. Patent No. 6,363,443). Applicants respectfully traverse these rejections.

Claims 1-9, 11, 14-17, 19, 24, 27, 28, and 30-36 remain pending in the present application. Reconsideration and allowance of all claims in view of the following remarks is respectfully requested.

Claims 1-5, 7, 9, 11, 15, 17, 19, 24, 28, 30, 31, and 34-36 were rejected under 35 U.S.C. § 103(a) as being unpatentable over FEDERKINS et al. in view of GULICK. Applicants respectfully traverse..

Independent claim 1 recites a method of processing data in a data transmitting system. The method includes forwarding data for further processing in the data transmitting system when data is being received; generating idle time synchronizing information including at least a runt abort packet during idle time when data is not being received, the idle time synchronizing information for synchronizing a data receiving system with the data transmitting system; and generating packet information by processing the data and the idle time synchronizing information in accordance with a packet protocol.

A proper rejection under 35 U.S.C. § 103 requires that three basic criteria be met.

First, there must be some suggestion or motivation, either in the references themselves, or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest each and every claim limitation. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not the applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). The cited combination of FEDERKINS et al. and GULICK fail to disclose or reasonably suggest the combination of features recited in Applicants' claim 1.

In particular, the Examiner acknowledges that FEDERKINS et al. fails to disclose or suggest generating idle time synchronizing information including at least a runt abort packet during idle time when data is not being received (Office Action, pg. 2). To remedy this acknowledged deficiency, the Examiner relied on col. 1, lines 60-68, col. 2, lines 1-2 and lines 32-52 of GULICK for allegedly disclosing generating idle time synchronizing information including at least a runt abort packet during idle time when data is not being received (Office Action, pp. 2-3). Applicants respectfully submit that these sections of GULICK do not disclose or suggest generating idle time synchronizing information including at least a runt abort packet during idle time when data is not being received, the idle time synchronizing information for synchronizing a data receiving system with the data transmitting system, as required by claim 1.

At col. 1, line 60 – col. 2, line 2, GULICK discloses:

The frame closing flag 16 indicates the end of the frame 10 and signals that the FCS 15 should be checked.

Data frames may be of varying length. The minimum length of any data frame is protocol specific, but is usually on the order of 4-6 bytes. If a frame is received by an HDLC receiver with less than the 4-6 bytes required by the system protocol, then a "short frame" is recognized and discarded. In theory, there is no maximum length of a frame, as long as the length exceeds the minimum protocol requirement, and the frame begins and ends with an opening flag and closing flag respectively.

This section of GULICK discloses merely that an HDLC protocol may discard frames less than a predetermined length. This section of GULICK, either alone or in proper combination with FEDERKINS et al. does not disclose or suggest generating a runt abort packet during idle time when data is not being received to synchronize a data receiving system with the data transmitting system.

At col. 2, lines 32-52, GULICK discloses:

The HDLC transmitter may also be programmed to transmit an abort character to signal an abort condition to the HDLC receiver. An abort character consists of at least seven contiguous ones (1111111). An abort condition is an action taken in response to the receipt of an abort character while the receiver is in-frame. A receiver is in-frame after receiving an opening flag and before receiving a closing flag. Upon the receipt of an in-frame abort character, the receiver terminates and discards the packet being received. An abort condition is recognized immediately upon receipt of the abort character, and may be implemented on either a bit boundary or a byte boundary.

The HDLC transmitter also monitors the data stream, and when five ones (11111) are transmitted in a row, the transmitter inserts a zero in the data stream so that, if the next data bit is also a one (1), the signal will not be falsely interpreted by the receiver as a flag (six ones in a row) or, in the case of two more ones, an abort signal (seven ones in a row). The extra zero has no data significance, therefore, whenever five ones appear in a row, the receiver is programmed to delete the zero which follows.

This section of GULICK discloses that an HDLC receiver may receive abort characters in the form of at least seven contiguous ones (1111111). If the receiver is in frame (between opening and closing flags), receipt of an abort character results in an abort condition whereupon the packet being received is discarded. This section of

GULICK also discloses that additional 0's may be inserted into a data stream to prevent a false determination that received data is a closing flag (6 consecutive ones) or an abort signal (seven consecutive ones). This section of GULICK has no relationship whatsoever with providing idle time synchronization information for synchronizing a data receiving system with the data transmitting system.

In making the rejection, the Examiner indicated that it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify FEDERKINS et al. to include generating idle time synchronizing information including at least a runt abort packet during idle time when data is not being received, the idle time synchronization information for synchronizing a data receiving system with the data transmitting system as taught by GULICK in order to provide a receiver for a high-level data-link controller which is capable of performing flag and abort detections, in-frame and out-of-frame determinations, zero-deletions, and several higher level controlling functions (Office Action, pg. 3). Applicants respectfully disagree with the Examiner's position.

FEDERKINS et al. discloses imbedding seven distinct timing mark bit patterns following identification of idle pattern bits to synchronize frames in a HDLC system (see FEDERKINS et al., Table 1, col. 4, lines 11-14). As acknowledged by the Examiner, FEDERKINS et al. does not disclose or suggest generating idle time synchronizing information including at least a runt abort packet during idle time when data is not being received (Office Action, pg. 2). GULICK has been cited to remedy this deficiency. However, GULICK discloses only the concept of using a sequence of seven consecutive ones (1111111) to represent an abort character.

Even assuming, *arguendo*, that GULICK discloses runt abort packets, there is absolutely no suggestion or motivation in GULICK to use the runt abort packets in the synchronization process of FEDERKINS et al. The alleged motivation recited above is merely a conclusory statement and no portion of either reference is pointed to as providing objective motivation for combining FEDERKINS et al. and GULICK. Such motivation does not satisfy the requirements of 35 U.S.C. § 103. GULICK in no way discloses or suggests generating a runt abort packet during idle time when data is not being received to synchronize a data receiving system with the data transmitting system. For at least this reason, claim 1 is considered patentable over the cited combination of FEDERKINS et al. and GULICK.

Claims 2-5 and 7 depend from claim 1. Therefore, claims 2-5 and 7 are patentable over the cited combination of FEDERKINS et al. and GULICK for at least reasons similar to those given above with respect to claim 1.

Independent claim 9 recites features similar to, but possibly different in scope from, features recited in claim 1. Therefore, claim 9 is patentable over the combination of FEDERKINS et al. and GULICK for at least reasons similar to those given above with respect to claim 1. Allowance of claim 9 is respectfully requested.

Claims 11 and 15 depend from claim 9. Therefore, claims 11 and 15 are patentable over the cited combination of FEDERKINS et al. and GULICK for at least reasons similar to those given above with respect to claim 9.

Independent claim 17 recites features similar to, but possibly different in scope from, features recited in claim 1. Therefore, claim 17 is patentable over the combination

of FEDERKINS et al. and GULICK for at least reasons similar to those given above with respect to claim 1. Allowance of claim 17 is respectfully requested.

Claim 19 depends from claim 17. Therefore, claim 19 is patentable over the cited combination of FEDERKINS et al. and GULICK for at least reasons similar to those given above with respect to claim 17.

Independent claim 24 recites features similar to, but possibly different in scope from, features recited in claim 1. Therefore, claim 17 is patentable over the combination of FEDERKINS et al. and GULICK for at least reasons similar to those given above with respect to claim 1. Allowance of claim 24 is respectfully requested.

Claim 28 depends from claim 24. Therefore, claim 28 is patentable over the cited combination of FEDERKINS et al. and GULICK for at least reasons similar to those given above with respect to claim 24.

Independent claim 30 recites features similar to, but possibly different in scope from, features recited in claim 1. Therefore, claim 30 is patentable over the combination of FEDERKINS et al. and GULICK for at least reasons similar to those given above with respect to claim 1. Allowance of claim 30 is respectfully requested.

Claims 31, 32, 34, and 35 depend from claim 30. Therefore, claims 31, 32, 34, and 35 are patentable over the cited combination of FEDERKINS et al. and GULICK for at least reasons similar to those given above with respect to claim 30.

Independent claim 36 recites features similar to, but possibly different in scope from, features recited in claim 1. Therefore, claim 36 is patentable over the combination of FEDERKINS et al. and GULICK for at least reasons similar to those given above with respect to claim 1. Allowance of claim 36 is respectfully requested.

Claims 6, 8, 14, 16, 27, and 33 were rejected under 35 U.S.C. § 103(a) as being unpatentable over FEDERKINS et al. in view of GULICK and further in view of ANDERSON et al. Applicants respectfully traverse.

Claims 6 and 8 depend from claim 1. The disclosure of ANDERSON et al. does not remedy the deficiencies in the disclosures of FEDERKINS et al. and GULICK set forth above, with respect to claim 1. Accordingly, claims 6 and 8 are patentable over the combination of FEDERKINS et al., GULICK and ANDERSON et al. for at least reasons similar to those set forth above, with respect to claim 1.

Claims 14 and 16 depend from claim 9. Applicants respectfully submit that the disclosure of ANDERSON et al. does not remedy the deficiencies noted above with respect to claim 9, as set forth in detail above. Accordingly, claims 14 and 16 are considered patentable over the combination of FEDERKINS et al., GULICK, and ANDERSON et al. for at least the reasons set forth above, with respect to claim 9.

Claim 27 depends from claim 24. Applicants respectfully submit that the disclosure of ANDERSON et al. does not remedy the deficiencies noted above with respect to claim 24, as set forth in detail above. Accordingly, claim 27 is considered patentable over the combination of FEDERKINS et al., GULICK, and ANDERSON et al. for at least the reasons set forth above, with respect to claim 24.

Claim 33 depends from claim 30. Applicants respectfully submit that the disclosure of ANDERSON et al. does not remedy the deficiencies noted above with respect to claim 30, as set forth in detail above. Accordingly, claim 33 is considered patentable over the combination of FEDERKINS et al., GULICK, and ANDERSON et al. for at least the reasons set forth above, with respect to claim 30.

CONCLUSION

Applicants submit that the application is now in condition for allowance, and notice to that effect is earnestly solicited. Applicants also respectfully submit that the proposed amendments to the claims do not raise new issues or necessitate any additional search of the art by the Examiner.

To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 50-1070 and please credit any excess fees to such deposit account.

Respectfully submitted,

By: 

Robin C. Clark
Reg. No. 40,956

11350 Random Hills Road
Suite 600
Fairfax, Virginia 22030
(571) 432-0800

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